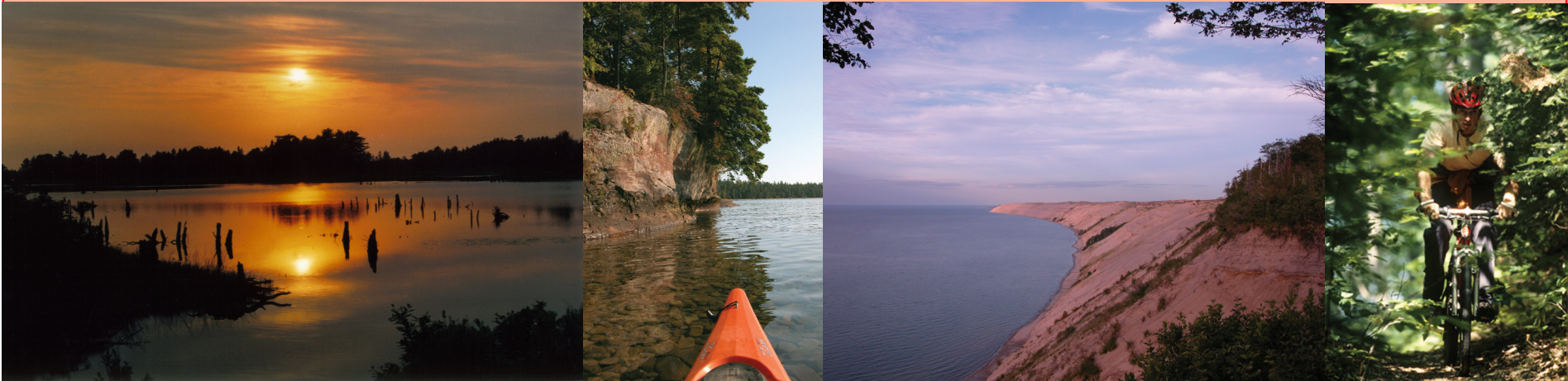


Superior Wildlands 2008-2009

A FREE GUIDE
To Your Central Upper Peninsula Federal Lands



WELCOME TO THE GREAT WATERS!

Plan a Michigan vacation getaway in the Great Waters today, land of quiet forests and rolling shores ... land of solitude and reflection ... land of mighty adventure.

Come discover the splendor of nature on our trail network during your Michigan vacation getaway. Come meet our friendly people. Reconnect with your family in our serene landscapes. Enjoy your favorite outdoor sports. Feel the mystique of the Michigan woods and waterways. Explore with one of our able guides or on a Michigan vacation

getaway of your own making. Experience the depth of our history and cultural tradition. You'll understand why the greatest lakes on Earth chose this land as their meeting place! North, south, east, west; it doesn't matter which direction you head in the Great Waters, there's always a north woods adventure waiting around the corner.



Michigan vacation getaway, three themed Michigan driving trails are detailed on the Great Waters web site.

www.greatwaters.net

Just choose a region and browse at your own pace, sampling only your favorite pastimes-like kayaking, cross country skiing, camping or morel mushroom hunting.



The Lake Michigan Trail ***Windswept Dunes and Hidden Lakes...***

- Sand Dunes of Hiawatha National Forest
- Brevort Lake Picnic Area
- Cut River Bridge
- Hog Island Campground
- Big Knob Campground
- Seney National Wildlife Refuge



The Lake Superior Trail ***Rugged Shores and Falling Water...***

- Grand Island National Recreation Area
- Pictured Rocks National Lakeshore
- Mouth of the Two-Hearted River
- Crisp Point Lighthouse
- Tahquamenon Falls
- Whitefish Point - Bird Observatory and Great Lakes Shipwreck Museum
- Point Iroquois Lighthouse
- Soo Locks

Detailed information about these driving routes, including maps and booklets, can be obtained at www.greatwaters.net and at many local businesses and welcome centers.

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Hiawatha National Forest

Dip your paddle in a river, immerse yourself in a cool clear lake, or skip a rock across a calm sparkling surface. Pedal a bike on a sun-dappled trail up to a breath taking vista. Catch a glimpse of the northern lights in a dark summer sky.

Pictured Rocks National Lakeshore

Take a few minutes and sit at the foot of a tree along the trail. Think of how special the Lakeshore is, the quiet, the solitude, the opportunity to immerse yourself in clean air and the pulse of nature. Visit an old rescue boat or a lighthouse and enjoy the history of your nation.

Seney Wildlife Refuge

Take a quiet evening bike ride on the wildlife drive. Watch for osprey, eagles, and bittern as they move about the refuge. Hear the rhythmic song of frogs and toads. Watch the setting sun turn the wetlands from green to gold.

Programs and Events



Campground Culture Tour Performers



Date	Time	Program	Presentor	Location	For more information call...
May					
May 15	6pm	Native Flower Slideshow	Deb LeBlanc USFS Ecologist	Munising	USFS 906-387-2512 (Pre-registration required)
May 17	1pm	Celebration Wildflowers Walk	Deb LeBlanc USFS Ecologist	Munising	USFS 906-387-2512 (Pre-registration required)
June	7pm	Wildlife Wednesdays	Evening Auto Tours	Seney Refuge	Seney NWR 906-586-9851, ext.15
June 7		Children’s Fishing Day	Open to all Children 1-16	Seney Refuge	Seney NWR 906-586-9851, ext.15
June 8	11am	17th Annual Kid’s Fishing Day		Camp 7 Campground	USFS 906-474-6442
June 14	1pm	Celebrating Wetland Flora	Deb LeBlanc USFS Ecologist	Munising	USFS 906-387-2512 (Pre-registration required)
June 10-12	9-3pm	Garlic Mustard Pull	Deb LeBlanc USFS Ecologist	Various Locations	USFS 906-387-2512 (Pre-registration required)
July					
Wed- Sun	12-6 pm	AuSable Lighthouse Tours	Ranger Karena/SCA Ali	AuSable Lighthouse	NPS 906-387-3700
Tuesdays	7 pm	Junior Ranger Program	Ranger Dave	Sand Point Headquarters	NPS 906-387-3700
Tues-Fri	1pm	On-the-Water Narrative	Ranger Dave	Pictured Rocks Cruises	NPS 906-387-3700
Wednesdays	7pm	Wildlife Wednesdays	Evening Auto Tours	Seney Refuge	Seney NWR 906-586-9851, ext.15
Wednesdays	7pm	Campground Program	Ranger Dave	Lower Hurricane River CG	NPS 906-387-3700
Thursdays	7pm	Campground Program	Ranger Dave	Twelvemile Beach CG	NPS 906-387-3700
Fridays	7pm	Campground Program	Ranger Dave	Kingston Lake CG	NPS 906-387-3700
July 12-13		Schooner Madeline Festival	Various Maritime Presentations	Bay Shore Park	NPS 906-387-3700
July 12	1pm	Hiawatha Summer Culture Tour	Joe Rogers- wildlife recovery	Pete’s Lake Campground	USFS 906-387-3700
July 12	5pm	Pictured Rocks Culture Tour	Joe Rogers- wildlife recovery	12 mile Beach	NPS 906-387-3700
July 12	12-5	ALTRAN van to AuSable	Disabled Transportation	Lower Hurricane River CG	NPS 906-387-3700
July 18	7pm	Hiawatha Summer Culture Tour	Matt Watroba	Camp 7 Campground	USFS 906-474-6442
July 19	7pm	Hiawatha Summer Culture Tour	Matt Watroba	Bay Furnace Campground	USFS 906-387-3700
July 24	7pm	Hiawatha Summer Culture Tour	Reg Pettibone Native Dancers	Camp 7 Campground	USFS 906-474-6442
July 25	7pm	Pictured Rocks Culture Tour	Reg Pettibone Native Dancers	12 Mile Beach CG	NPS 906-387-3700
July 26	12-5	ALTRAN van to AuSable	Disabled Transportation	Lower Hurricane River CG	NPS 906-387-3700
July 26	7pm	Hiawatha Summer Culture Tour	Reg Pettibone Native Dancers	Bay Furnace Campground	USFS 906-387-3700
August					
Tuesdays	7 pm	Junior Ranger Program	Ranger Dave	Sand Point Headquarters	NPS 906-387-3700
Wed- Sun	12-6 pm	AuSable Lighthouse Tours	Ranger Karena/SCA Ali	AuSable Lighthouse	NPS 906-387-3700
Tues-Fri	1pm	On-the-Water Narrative	Ranger Dave	Pictured Rocks Cruises	NPS 906-387-3700
Wednesdays	7pm	Wildlife Wednesdays	Evening Auto Tours	Seney Refuge	Seney NWR 906-586-9851, ext.15
Wednesdays	7pm	Campground Program	Ranger Dave	Lower Hurricane River CG	NPS 906-387-3700
Thursdays	7pm	Campground Program	Ranger Dave	Twelvemile Beach CG	NPS 906-387-3700
Fridays	7pm	Campground Program	Ranger Dave	Kingston Lake CG	NPS 906-387-3700
		Annual Butterfly Migration		Peninsula Point Lighthse	Rapid RiverUSFS 906-474-6442
August 2	7pm	Hiawatha Summer Culture Tour	Wanda Degen	Bay Furnace Campground	USFS 906-387-3700
August 9	12-5	ALTRAN van to AuSable	Disabled Transportation	Lower Hurricane River CG	NPS 906-387-3700
August 15	7pm	Hiawatha Summer Culture Tour	Tom Kastle-Great Lakes Legends	Camp 7 Campground	USFS 906-474-6442
August 16	12-6pm	MDNR Pocket Park	UP State Fairgrounds	Escanaba	USFS 906-474-6442
August 16	7pm	Hiawatha Summer Culture Tour	Tom Kastle-Great Lakes Legends	Bay Furnace Campground	USFS 906-387-3700
August 22	7pm	Hiawatha Summer Culture Tour	Neil Woodard	Camp 7 Campground	USFS 906-474-6442
August 23	12-5	ALTRAN van to AuSable	Disabled Transportation	Lower Hurricane River CG	NPS 906-387-3700
August 23	7pm	Hiawatha Summer Culture Tour	Neil Woodard	Bay Furnace Campground	USFS 906-387-3700
September					
Wednesdays	7pm	Wildlife Wednesdays	Evening Auto Tours	Seney Refuge	Seney NWR 906-586-9851, ext.15
September 6		Native Seed Collection Project	Deb LeBlanc USFS Ecologist	Munising	USFS 906-387-2512 (Pre-registration required)
September 27		Scout Activity Day	Activities for Boy and Girl Scouts	Seney Refuge	Seney NWR 906-586-9851, ext.15 (Pre-registra tion required)
October 12-18		National Wildlife Refuge Week		Seney Refuge	Seney NWR 906-586-9851, ext.15

Natural History Associations - Partners in Interpretation & Education

The money you spend on souvenirs in gift stores at the Park, Forest or Refuge, generously donate, or contribute for membership all goes to non-profit natural history associations to be spent on interpretation, education and research. Each natural history association is guided by a volunteer Board of Directors, which votes on how revenue and donations should be spent based on budget and projects suggested by agency staff and volunteers. Here are some improvements paid for in whole or part by these associations:

- Special events
- Informational leaflets
- Exhibits and interpretive signs
- Observation scopes and decks
- Food stipends for interns
- Teacher workshop materials and support.
- This newspaper!

Hiawatha Interpretive Association
PO Box 913
Munising, MI 49862

Seney Natural History Association
1674 Refuge Entrance Rd.
Seney, MI 49883

Eastern National
470 Maryland Drive, Suite 1
Ft. Washington, PA 19034



Hiawatha Interpretive Association



Calling All Photographers!

We invite you to visit the Hiawatha National Forest (HNF) and the Seney National Wildlife Refuge and enter your photos in our Annual Photo Contests. For information and rules, contact:

Hiawatha N.F. Photo Contest
400 East Munising Avenue
Munising, MI 49862

Seney NWR Photo Contest
1674 Refuge Entrance Road
Seney, MI 49883

Artist-in-Residence Programs

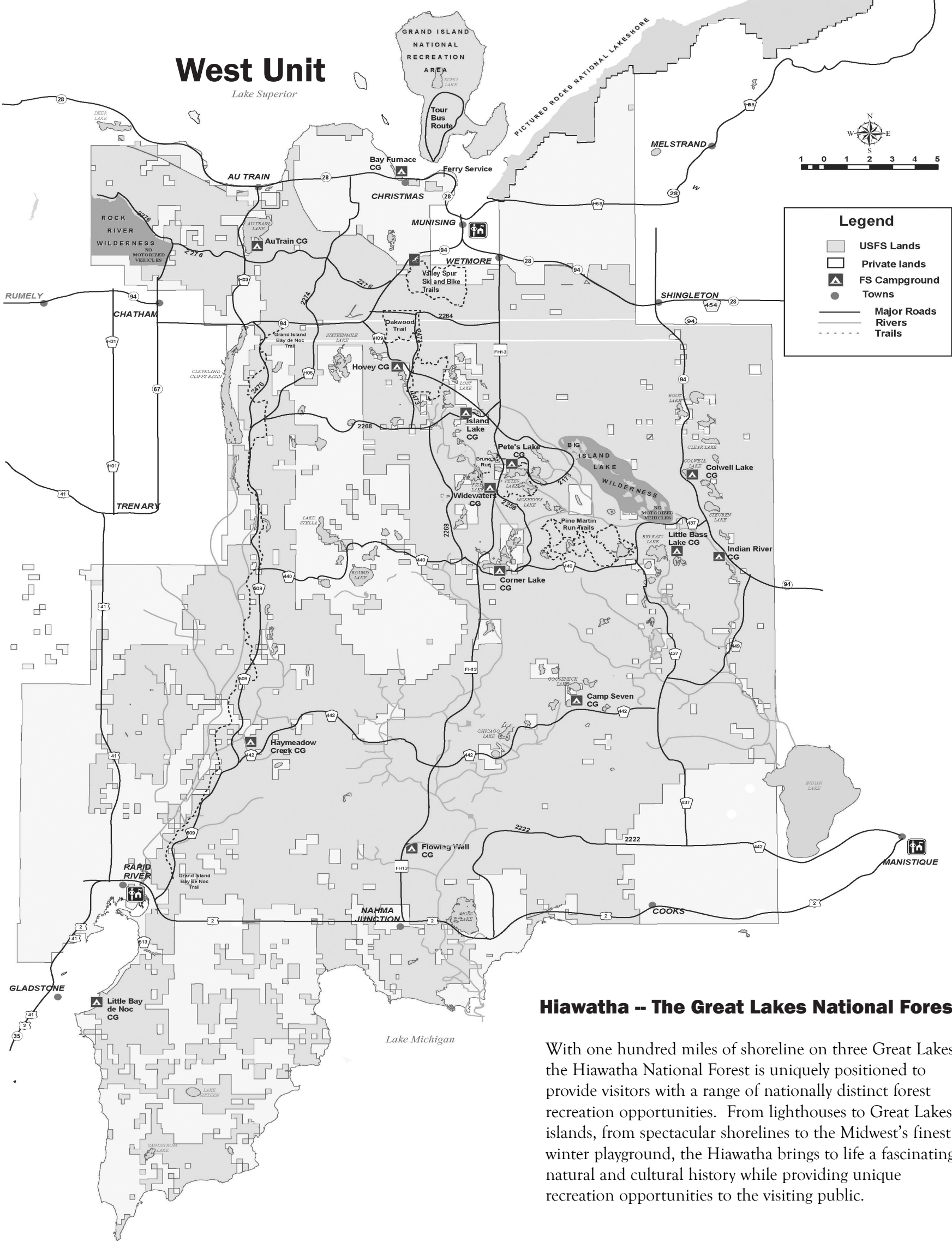
Are you an artist working in two dimensions looking for a residency experience in the beautiful central Upper Peninsula? Would the cliffs of Grand Island or Pictured Rocks inspire you? Both Hiawatha National Forest and Pictured Rocks National Lakeshore offer artist in residence programs. Let our landscapes and history inspire you!

For more information contact Pictured Rocks National Lakeshore or Hiawatha National Forest at 906-387-3700.



Hiawatha National Forest

West Unit



Hiawatha -- The Great Lakes National Forest

With one hundred miles of shoreline on three Great Lakes, the Hiawatha National Forest is uniquely positioned to provide visitors with a range of nationally distinct forest recreation opportunities. From lighthouses to Great Lakes islands, from spectacular shorelines to the Midwest's finest winter playground, the Hiawatha brings to life a fascinating natural and cultural history while providing unique recreation opportunities to the visiting public.

The Hiawatha National Forest consists of two large units totaling about one million acres. The West Unit (shown above) is located between Munising, Manistique and Rapid River. The East Unit is located between St. Ignace and Sault Ste. Marie. six wilderness areas, five National Wild and Scenic Rivers, and one National Recreation Area are included within its boundaries. The Forest touches Lake Superior, Lake Michigan and Lake Huron and boasts six lighthouses and a 26 mile

scenic byway along Lake Superior's south shore.

Great Camping

On the West Unit, the Hiawatha National Forest offers 12 developed campgrounds. These campgrounds provide sites with a fire ring, picnic table, tent or trailer pad, and parking. Drinking water, toilets, and trash disposal are also provided. Some offer waste water dump stations. They do not offer showers and only a few electrical hookups

are available. All campgrounds have some sites that can accommodate large RVs.

In addition to the Forest's developed campground, the Hiawatha offers numerous dispersed campsites for those seeking more solitude and few amenities. These campsites are usually accessible over primitive roads, but walk-in sites are also available. The spacing of dispersed sites is irregular, with some distance between campsites. Water and pit toilets are pro-

vided in a few instances. Permits are required for these sites. For more information on camping, please contact the Munising Visitor Center at 906-387-3700.



Using Your OHV on the Hiawatha National Forest



The Hiawatha National Forest is pleased to announce that its first Motor Vehicle Use Map (MVUM) is now available to the public. The free maps stand alone as a tool to help you determine where you can ride. The Motor Vehicle Use Mapping and Travel Management Rule are national policies that require each Forest to provide a free map of its motor vehicle transportation system.

The Hiawatha National Forest has had designated roads, trails and areas for motorized use since 1986. So for the Hiawatha, the job of creating the MVUM was largely one of documenting our existing condition. To view the Hiawatha's maps on-line, visit our website http://www.fs.fed.us/r9/forests/hiawatha/recreation/atv_trails/. Or obtain a free copy map by visiting one of our Forest offices.

What you need to know

- The rules apply to all wheeled motorized use, not just ORVs and ATVs. Snowmobile use on the Hiawatha will not be affected.
- The MVUM maps will be updated annually. In order to remain current, responsible riders must obtain and use a current map to guide their use of the Forest transportation system.
- Motorized travel off of the designated system is still prohibited, as it has been since 1986.
- The MVUM map supersedes the old "headshake rule." While the system of usable roads has changed very little from the old "head shake rule" system, the MVUM map is the new method for determining whether and what type of motor vehicle use allowed on a given road/trail.
- Seasonal restrictions are keyed in the maps.
- Law enforcement will continue to enforce these rules.

Additional information on the Travel Management Rule and its implementation is available on-line at <http://www.fs.fed.us/recreation/programs/ohv> or by calling your local Forest Service offices.

McKeever Cabin

Looking for a quiet, rustic place to get away for a few nights? Nestled in the trees on a knoll above McKeever Lake, the Hiawatha's McKeever Cabin may be just what you've got in mind. The rustic cabin can accommodate up to six people. Cooking can be done on your own camp stove, or on the top of the barrel stove which is equipped with a primitive cooking rack. Plan to bring your own equipment including campstove, dishes, utensils, containers for carrying water, toilet paper, lanterns, sleeping bags and pillows. The cabin has one table with stools, two bunk beds with mattresses, one countertop, a corner seat and two wooden chairs. There are no modern bathroom facilities or electricity. A pit toilet is located just off the trail to the cabin, and there is a summer/winter hand pump on the lake trail. The Forest Service supplies firewood. To make reservations call 1-877-444-6777 or go to www.recreation.gov. McKeever is one of two cabins located on the Hiawatha National Forest. For information on Tom's Cabin, please call 906-474-6442.



Winter Skiing



The central Upper Peninsula is truly a winter wonderland, what with the abundance of snow that falls here. Taking advantage of this snowy resource, the Hiawatha offers several wonderful cross-country ski trails for your enjoyment!

Valley Spur Ski Trail

Offers 62 kilometers of regularly-groomed classic and skating trails for all abilities. Located in the "Lake Effect Snowbelt," this fantastic trail offers wonderful terrain and scenery. In addition, the Forest provides a rustic log cabin Day Lodge open on weekends throughout the skiing season. Call 906-387-4918 for ski trail conditions.

McKeever Ski Trail

Also near Munising, offers 8.5 kilometers of more primitive skiing opportunities. At McKeever, the narrow, scenic trails are groomed only about once per week. And if you'd like trail-side lodging, consider renting the Hiawatha's rustic McKeever Cabin, situated beside McKeever Lake.

Special Events, Races and Festivals on the Hiawatha National Forest

Many special events take place on the Hiawatha National Forest that are sponsored by private citizens or non-profit groups. Anyone interested in having an event on the National Forest must obtain a special use permit. For more information about special use permits, please contact the Forest Service at 906-786-3327.

Grand Island Trail Marathon and 10 K, July 26, Grand Island NRA, Munising, MI. If you like trail marathons, you won't want to miss this one! The race route takes runners along one of the most spectacular shorelines in Lake Superior. Contact www.greatlakesendurance.com/ or runskikayak@hotmail.com for more information.

Great Lakes Sea Kayak Symposium July 18-21 in Grand Marais, MI. Whether they are being introduced to kayaking for the first time or you have been on the water for years, attendees will find classes and trips. The oldest kayaking symposium on the great lakes welcomes paddlers of all ages and abilities for a weekend packed with fun and learning opportunities. Trips include Grand Island National Recreation Area. Contact the Great Lakes Sea Kayaking Club at www.glsks.org/Jacob1965@sbcglobal.net for more information.

Tour Da Woods September 6, Mountain Bikers will love the remote trails that make up this challenging race. More experienced riders can take on "Hiawatha's Revenge" 30 mile race and beginners can try the 15 mile "Red Deer Run". There is even a "Tour da Valley" youth race. Contact Anna River Peddlers at www.annariverpedalers.org/events_registration.html or contact@annariverpedalers.org for more information.

Aldo Leopold Half Marathon, October 25th, Grand Island NRA, Munising, MI. Details to be announced. The race route takes runners along one of the most spectacular shorelines in Lake Superior. Contact www.greatlakesendurance.com or runskikayak@hotmail.com.

Cross Country Ski Bash, January 2009 at Valley Spur. Adults may choose between the 24K Big Foot's Revenge or 12K Stairway to Heaven. The Locomotive Chase is a 5K Youth Event. Challenge yourself, the trail or take it as a race. No matter what, you will not forget the beauty of your surroundings as you travel through the forests and hills of the Hiawatha National Forest. For more information visit www.valleyspur.org or contact Dave Worel at 906-387-2865.

UP 200 sled dog race, February 2009.— The U.P. 200 is a competitive, 12 dog, mid-distance sled dog race, always held on the third weekend of February. The race is approximately 240 miles in length and is a qualifying race for the Iditarod. Over 15,000 visitors come to Michigan's Upper Peninsula (U.P.) to see the U.P. 200! It is a favorite winter event for local residents and out of town guests. For more information, visit www.up200.org

Snowman Biathlon, February 2009, Valley Spur. The annual "Snow Man" Biathlon consists of a 12k ski race, followed by a 3k snowshoe run. For more information visit www.valleyspur.org or contact Dave Worel at 906-387-2865.

Taste and Glide, March 2009 at Valley Spur. Always the first Saturday in March, the popular Taste and Glide cross-country ski event celebrates the joy of skiing and the joy of eating! Fun for all ages, the only race is to get to the chocolate strawberries. For more information visit www.valleyspur.org or contact Dave Worel at 906-387-2865.

Munising 300 snowmobile race, March 2009. The exciting Munising 300 snowmobile race includes many trails through the Hiawatha National Forest and the route even goes out to Grand Island and back. For more information visit www.algercounty.org/race.html.



Bruno's Run

Bruno's Run is considered by many to be one of the premier mountain biking trails in the Central U.P. This 9 mile loop trail winds past several small lakes, along the Indian River, over foothills, through valleys, and into Wide Waters and Pete's Lake campground areas. The single track nature of this trail provides a more secluded woods experience and if you are alert, it is likely that you will spot wildlife along

Mountain Biking the Hiawatha

the trail. Located about 11 miles south of M-28, Bruno's Run trail may be reached from the north or the south via H-13. The trail may be accessed from both Wide Waters and Pete's Lake campgrounds as well as from H-13 at Moccasin Lake and FR 2173 at Grassy Lake. Limited parking is available at each site.

Valley Spur

This 25 mile bike trail system is a combination of ski trails and two-track roads. There are 4 loops that vary in length and range from easy to advanced. These trails are generally wider and flatter, perfect for families. There are two trail heads. The main trail head is located on M-94 just a few miles south of Munising. The second trail head is located on the Coalwood road off of M-94 two miles south of the main trail-head.

Grand Island National Recreation Area

Approximately 40 miles of biking opportunities exist on Grand Island. Trails vary from easy to challenging. Please see article below for details.

Please be aware that all of these trails are multi-use trails. Be prepared to meet hikers and dogs. Bicyclists should maintain control of their speed at all times and approach turns in anticipation of someone around the bend. For more detailed maps, contact the Munising Visitor Center at 906-387-3700.



Christmas Range Lights

Tucked away on the Hiawatha National Forest among the tag alders and swamp conifers south of M-28 near Christmas is a lighthouse many people drive by without noticing. This is the Grand Island Harbor Rear Range Light (a.k.a. Christmas Range Light), which stands 62 feet tall. Its partner, the Front Range Light, is only 14 feet tall. Range Lights work in pairs. By keeping the Rear Range Light aligned with the Front Range Light, mariners were able to stay on the proper heading through the narrow channel west of Grand Island. Tours of the Rear Range Light are available during the summer. Please contact the Visitor Center in Munising for dates and times.



Bike Grand Island!

Grand Island is the perfect place to spend a day, weekend, or even just a few hours biking and exploring. The island's breathtaking overlooks, pristine sandy beaches, fascinating cultural sites, deep hard woods, and inland lakes make it an exciting and secluded mountain biking destination. The island provides a combination of rugged dirt/sand trails and easier gravel roads that will accommodate any level of biker.

For example, a family planning a day of biking can arrive on the early boat, take a leisurely pace and travel partway up the west rim trail, cut across the island on an old logging road to Trout Bay Overlook, travel down to Trout Bay day use area for a picnic meal and beach walk, and finish the day biking down along Murray Bay to Williams Landing in time to return to the mainland. More advanced, energetic cyclists can mountain bike the 20-mile main island perimeter route in four to six hours, with time for brief

stops and some exploration. *Bicycling off roads and trails is not allowed because it damages fragile vegetation.*

If you don't have a bike with you, no problem! The Grand Island Ferry Service rents mountain bikes right at William's Landing. For more information about bike rentals or ferry schedules, please call 906-387-3503. If you are traveling to and from the island on the passenger ferry, keep the ferry schedule in mind as you plan your time on the island. Consider your level of fitness and your pace as you make route choices.

Other Day Use Opportunities

- Bus tours are available on the southern part of the island and last 2-2 1/2 hours. The tour takes you to all of the main historic landmarks on the island and popular day use sites. Buses are wheelchair accessible and so are some of the trails and waysides.
- Spend the day beachcombing, picnicking or swimming on one of Grand Island's fabulous beaches. Accessible by private boat, biking or hiking, these beautiful sand and rock beaches will captivate you.
- Kayakers can experience the island from a unique perspective. Discover private coves and spectacular rock formations from the water.

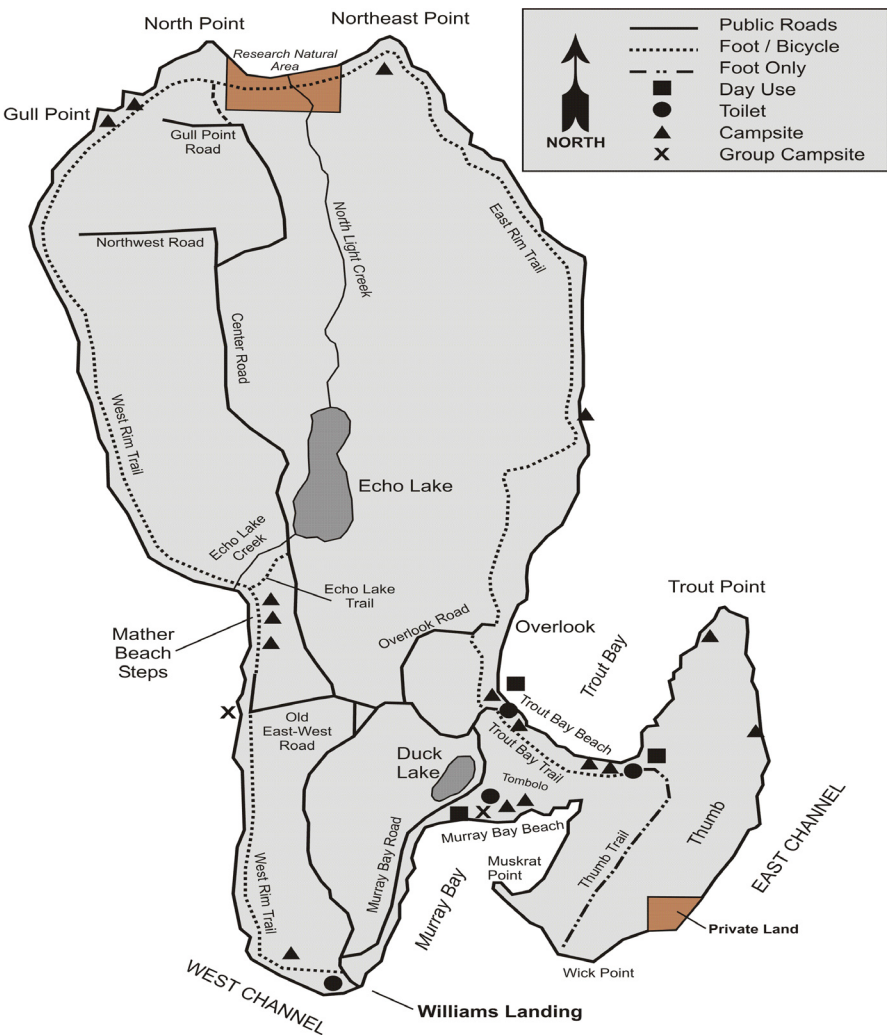
Overnight Opportunities

At this time there are 17 designated campsites on Grand Island; two at Murray Bay, four

at Trout Bay and 11 scattered around the Island's rim trail. Large groups of 7 to 25 people may camp only at the designated group sites at Murray Bay and Juniper Flats. Random camping is also allowed with certain restrictions.

If you are interested in planning a day use or overnight trip to Grand Island, we recommend that you contact the Visitor Center at 906-387-3700 for more information. We offer updated

day use and camping brochures that can assist in planning a trip to suit you. Topographic maps are also available for a fee.



Pictured Rocks National Lakeshore



Pictured Rocks National Lakeshore participated in the Climate Friendly Parks program in July 2007 by hosting a number of community leaders and organizations in a three day workshop held in Munising. The meeting was hosted by the Environmental Protection Agency Air Quality Division and the National Park Service Environmental Leadership and Sustainability Office in Washington. Having held the workshop, the Lakeshore now belongs to a network of parks that are putting climate friendly behavior at the forefront of sustainability planning in national parks. By conducting a greenhouse gas (GHG) emission inventory, setting an emission reduction target, developing an Action Plan, and committing to educate park staff, visitors, and community members about climate change, Pictured Rocks National Lakeshore is serving as a model for climate friendly behavior within the National Park Service. To date, 16 parks are Climate Friendly Parks participants.

Pictured Rocks NL has committed to reducing GHG emissions by 15% below 2005 levels which was selected as the base data year. The Action Plan lays out the measures the park will take to meet this goal by 2012. A list of actions includes:

- Encourage climate change awareness in the community.
- Encourage visitors to reduce greenhouse gas emissions.
- Highlight what the park is doing to address climate change.
- Develop park specific interpretive materials for visitors.
- Incorporate climate change awareness into visitor education.
- Incorporate climate change into park staff trainings.
- Manage waste through source reduction, composting, recycling, and combustion.
- Develop park policy that promotes energy efficiency and energy conservation.
- Replace existing inefficient devices with energy efficient devices.
- Install energy efficient light fixtures.
- Work with partners to improve efficiency of transportation systems.
- Replace existing park, concessionaire, and other vehicles with alternative fuel vehicles and hybrids.
- Reduce fuel consumption among non-road equipment.

In addition to implementing these measures, Pictured Rocks NL will:

- Perform subsequent emission inventories to monitor progress.
- Identify additional actions to reduce GHG emissions and inform the public on climate change.
- Include additional actions, and strengthen existing actions, to reduce GHG emissions in future Action Plans.

Climate change presents significant risks and challenges to the National Park Service. For example, as a result of climate change, Pictured Rocks National Lakeshore will likely see lake levels and temperatures vary significantly from historical averages—the consequences of which may include impaired species habitat and decreased recreation opportunities. In short, climate change threatens the identity and unique resources of our national parks. Scientists cannot predict with certainty the general severity of climate change nor its impacts with certainty. However, the current warming trend suggests that the problem is real and should be taken seriously.

Average global temperatures on the Earth's surface have increased about 1.1°F since the late 19th century, and the 10 warmest years of the 20th century all occurred in the last 15 years. The single leading cause of this warming is the buildup of greenhouse gases in the atmosphere - primarily carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O) - which trap heat that otherwise would be released into space. The continued addition of CO₂ and other GHGs to the atmosphere will raise the Earth's average temperature more rapidly in the next century; a global average warming of 4-7°F by the year 2100 is considered likely.

Rising global temperatures will further raise sea level and affect all aspects of the water cycle including snow cover, mountain glaciers, spring runoff, water temperature, and aquatic life. Climate change is also expected to affect human health, crop production, animal habitats, and many other features of our natural and managed environments.

One strategy the Lakeshore is recommending to visitors is the "Do Your Part" program. This interactive website enables people to quantify their contribution to greenhouse gases and identify ways they can reduce them to help keep the planet from getting even warmer. Though it may take many years to slow the trend of global warming, things we do today in our everyday lives can help keep our descendants from experiencing a very different social, economic and ecological environment than the one we have grown up in. Please join Pictured Rocks National Lakeshore by visiting www.doyourpart.org. A copy of the Lakeshore's Climate Friendly Parks Action Plan is available on www.nps.gov/piro.

National Parks of Lake Superior Foundation



The National Parks of Lake Superior Foundation (NPLSF) is a newly organized, privately supported effort to fund special projects in the five U.S. National Park areas on Lake Superior. These include Keweenaw National Historical Park (MI), Grand Portage National Monument (MN), Apostle Islands National Lakeshore (WI), Isle Royale National Park (MI), and Pictured Rocks National Lakeshore, (MI).

Your donation to NPLSF will assist parks with worthy projects over and above funding for basic park operations. Projects include preservation of historic structures, improved visitor services, enhanced environmental education programs, and MORE! The NPLSF is actively seeking partners to assist in developing this special new funding organization which will complement efforts by the Friends organizations of individual parks. We invite individuals and major donors to contact the Foundation to learn more about how they can become involved in these efforts. Your donation is tax deductible. For additional information or to make a donation, contact:

www.nationalparksoflakesuperiorfoundation.org

P.O. Box 632
Houghton, MI 49931
906-228-7914

Things to Consider

Falling rock, cascading dunes, rip tides and encounters with bears due to improper backcountry storage of food...as a Lakeshore visitor, these are things you should be thinking about.



Many of the cliff areas along the North Country Trail are actually overhangs with free space below. As you are hiking in the park, remember this and stay back from the edge.



While the Grand Sable Dunes are a unique and beautiful part of the park, they too can hold hazards.

Be aware that sand banks can collapse - sending you downslope or perhaps covering you. Take care when traversing dune faces.

Rip currents are possible at several beach locations along the Lakeshore depending on weather and water conditions. Check the bulletin boards to know what they look like and how to get out of one.



We would all like to see a bear during our visit to the park, but at a safe distance. Remember that a fed bear is a dead bear. Please follow food storage guidelines posted on bulletin boards and in backcountry regulations by hanging your food on the food pole provided or securing food in a vehicle.



Regulations In Brief

We hope you enjoy your visit to the Lakeshore. To help ensure it is pleasant, please take a couple of minutes to become familiar with the following use regulations of the National Lakeshore.

Camping - permitted only within designated Lakeshore campsites. Camping permits are required. Beach or roadside camping is prohibited.

Backcountry Campers - must purchase a \$5 per night/person backcountry permit prior to entering the backcountry. Permits are available by reservation and in-person at visitor centers in Munising and Grand Marais.

Pets - where permitted, must be on a 6-foot leash. Check the pet map on bulletin boards for specific locations of pet walking areas.

Bicycles - permitted on roads where automobiles are permitted. Not permitted on hiking trails or roads closed to vehicular traffic.

Hunting - prohibited park-wide during the high visitor use period of April 1 through Labor Day. Hunting is allowed the remainder of the year as established by state and federal laws. Target shooting and trapping are prohibited year-round.

Campfires - allowed only in fire rings. Fires on beaches – except in fire rings provided – are prohibited.



ATVs - are prohibited in the park.

Removing Rocks or other natural features is prohibited. Please do not injure or remove plants or harass wildlife.

Wildlife Feeding Prohibited - Birds and small mammals rely on natural food to get them through the winter. Please do not make them dependent on human food.

No Littering - Each of us enjoy a clean Lakeshore. Please pick up after yourself and others.

Fireworks - are best left to the experts. Use or possession of fireworks within the Lakeshore is prohibited.

Day Hikes of Note

Your visit to Pictured Rocks National Lakeshore may be only an hour or two or you may spend a week or more. If you only have a day or two to spend at the Lakeshore, consider visiting these popular attractions in developed areas of the park. Please note that bicycles are not permitted on Lakeshore trails. Pets are allowed along all park roads and are permitted in some other areas. Pets must always be on a 6-foot leash.

Munising Falls

Nestled in a cool, shady valley, the 50 foot falls are at the end of a short 800 foot walk on an improved trail. The trail is a good place to look for wildflowers in spring and early summer. Water from the creek was once used in the production of iron at the Schoolcraft blast furnace, a story told on wayside exhibits and in the Munising Falls Interpretive Center. Pets are allowed on the trail to Munising Falls, but not on Becker Farm entrance road and fields or on North Country Trail.

Sand Point

The Sand Point beach is a popular spot for walking in the evening to watch the sun go down over Munising Bay. The Sand Point Marsh Trail, a half-mile disabled accessible interpretive trail, features a large print brochure for visually impaired visitors. Sand Point is a good place to look for warblers in spring and fall. Park Headquarters is also located on Sand Point in a former U.S. Coast Guard building. Pets are permitted on Sand Point to the base of the Pictured Rocks cliffs. Pets are prohibited on Sand Point Marsh Trail.

Miners Castle

Beginning at the picnic area, a paved foot trail leads you past interpretive exhibits to breathtaking overlooks of Lake Superior and Grand Island. Erosion over long periods of time has created the interesting rock formations that give this place its name. Pets permitted in picnic and overlook area but prohibited on the North Country Trail.

Miners Falls *(photo at right)*

A 1.2 mile round trip gravel path through a deep woods environment leads to the falls overlook. Miners River plunging some 60 feet over a cliff is home to brook and steelhead trout. A free, self-guiding interpretive trail guide is available at the trailhead. Pets are permitted in picnic area on a 6 foot leash, but are prohibited on the trail to Miners Falls.



Miners Beach

A picnicker and beach walker's delight, Miners Beach extends for one mile on Lake Superior where waves roll in to polish beach cobbles. Miners River is popular for steelhead fishing in spring and fall. A 1.0 mile trail connects Miners Castle developed area and the picnic area at Miners Beach. Pets are allowed in picnic area and on Miners Beach.

White Pine Trail

Located at the Little Beaver Lake Campground this 1.0 mile self-guiding interpretive trail explores the plant and animal communities of a cool, shady valley. Free trail guides are located at the trailhead. No pets are allowed in this area.

Chapel Rock

Circumnavigating Chapel Lake takes you to the beautiful Chapel Beach and Chapel Rock. The 6.6 mile trip makes a great day hike. Pets are not permitted on this trail.

White Birch Trail

Located at the Twelvemile Beach Campground, this two mile self-guiding interpretive trail explores a variety of ancient Lake Nipissing beach and upland plant communities. Free trail guides are located at the trailhead. No pets are allowed in this area.

Log Slide Overlook

The 1000 foot trail to the viewing platform from the picnic area is worth the walk. Newspaper accounts tell of logs sent down the dry log chute generating enough friction to cause the chute to catch fire. Today the chute is gone, but the lumberjack stories still linger as you gaze out over the Grand Sable Banks and Dunes. This is a good place to glimpse the Au Sable Light Station to the west and Grand Marais to the east. Pets are allowed only to the overlook platform.

Au Sable Light Station

This picturesque station is being renovated by the National Park Service. Strolling about the grounds on a stormy day, one can feel the sense of duty and history for which this station is preserved. Access to the station is by a 1.5 mile hiking trail beginning at the east end of the lower Hurricane River Campground. No pets are allowed in this area. Check at visitor centers and park bulletin boards for summer interpretive tours scheduled at the light station. Tour fee \$3 adults.



Sable Falls

A picnic lunch at Sable Falls can begin a great afternoon of exploring. A 0.5 mile hike from the parking lot leads you to the falls and Sable Creek and on to Lake Superior. No pets are allowed in this area.

Visit our official Lakeshore website: www.nps.gov/piro



Invasive species

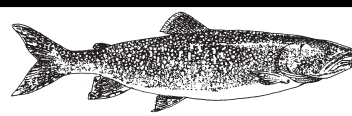
Pictured Rocks National Lakeshore staff and volunteers combat non-native plants, often referred to as exotic plants, annually to protect assemblages of native plants and habitat necessary for native species to thrive. Exotic plants were first formally documented as a potential threat to park resources in 1981, and are now recognized as a serious threat to native plant communities. As of 2006, the flora of Pictured Rocks includes at least 127 documented exotic plant species, some of which likely were introduced to the park as early as the late 1800's. It is estimated that approximately 20 additional exotic plant species have been introduced or discovered at Pictured Rocks since floristic surveys were conducted in the early 1970's. Some invasive exotics such as spotted knapweed (*Centaurea biebersteinii*) and periwinkle (*Vinca minor*) were noted as common at the park at least 30 years ago.

In particular, shade tolerant and highly invasive species present the greatest risks; these aggressive exotic plants are the target of active management. Fortunately, only a small proportion of the lengthy list of non-native plants fall into this category, the majority being "lawn weeds" that are restricted to the road right-of-ways and highly disturbed areas, or plants that although widespread are unlikely to negatively impact native flora or local ecosystems. There is potential for many more exotic plant species to enter the park in the future, and for present populations to increase in number, area covered and density. Several species have spread vigorously due to lack of attention and/or a lack of resources to address them. At least 300 acres of Grand Sable Dunes, a globally rare perched dune ecosystem designated as a Research Natural Area, are now infested with spotted knapweed and red clover (*Trifolium pretense*). Several plant species of concern are found at Grand Sable Dunes, including Pitcher's thistle (*Cirsium pitcheri*), a federally threatened species. Other exotic plants such as goutweed (*Aegopodium podagraria*) were likely planted by previous landowners in and around buildings and gardens at developed areas (e.g., Sand Point) and are slowly spreading into undisturbed areas of the forest understory. Additionally, other known exotics are currently found near the park and without

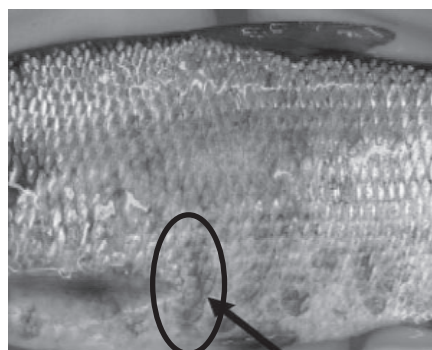


continuous monitoring and spot control efforts undoubtedly will spread into the park. A few of the most problematic species found nearby include baby's breath (*Gypsophila paniculata*), garlic mustard (*Alliaria petiolata*), Japanese knotweed (*Polygonum cuspidatum*) and purple loosestrife (*Lythrum salicaria*). Exotic plant management is a necessary part of the National Park Service's responsibility to protect our natural heritage. An exotic plant management program requires both a guiding plan and long-term, steadfast commitment. Short-term lapses can allow populations of invasive species to expand quickly and negate previous control efforts. The threat of exotic species will not disappear. The keys to successful control are a systematic approach and consistent follow-up. Anything less will only provide the park with knowledge of an increasing problem.

This summer, Pictured Rocks National Lakeshore will begin an enhanced three-year program to map and control exotic plants. Previous mapping data and control efforts will be assessed to plan and implement a large scale control effort throughout the park. Both mechanical (e.g. hand pulling, mowing, cultural control) and chemical control methods will be used extensively to treat exotics and native seed and plants will be used to replant areas when necessary. Some of the exotic species targeted may have showy flowers or leaves that visitors enjoy viewing such as the blue forget-me-not (*Myosotis* spp.) or goutweed. These species, while visually pleasing, are not native to the park and in many cases displace native flower species such as violets (*Viola* spp.), Jack-in-the-pulpit (*Arisaema triphyllum*), and trillium (*Trillium* spp.). If you see park staff spraying vegetation with backpack sprayers or ATV-mounted boom sprayers, it is part of this ongoing program to protect native plants and habitat.



The National Lakeshore and other National Parks around Lake Superior are very concerned about preventing VHS, a fish disease caused by a virus that has recently appeared in the lower Great Lakes and some inland lakes which has the potential to significantly impact native fish populations and recreational fishing opportunities in our area. Pictured Rocks National Lakeshore, Isle Royale National Park, Apostle Islands National Lakeshore, Grand Portage National Monument, and the Grand Portage Band of Lake Superior Chippewa are working with other federal and state agencies, Great Lakes Commission, and other organizations to prevent or slow the spread of VHS within parks and tribal waters.



Red splotches in tissue

What is VHS?

VHS (Viral Hemorrhagic Septicemia) is an acute fish disease caused by a virus (called VHSV) that was first noticed in Europe. It spread to the Pacific Northwest in 1988, where it infected migrating salmon. Later, VHSV was found off the Atlantic coast of Canada, and since 2003 it has killed fish in each of the lower Great Lakes, as well as a few inland lakes in the Lower Peninsula, Wisconsin, New York, and southern Ontario. Until the virus reached the Great Lakes, scientists thought only marine fish were susceptible. Since 2006, 28 new species of freshwater fish have died from VHS. These include lake whitefish, rainbow trout, muskellunge, walleye, yellow perch, brown trout, largemouth bass, smallmouth bass, rock bass, northern pike, bluegill, pumpkinseed, burbot, and emerald shiners.

VHSV does not affect humans, even if a diseased fish is eaten. There are no human health problems associated with VHSV.

Does VHS kill fish?

Yes, VHS can kill large numbers of fish in a short period of time. The virus causes bleeding in the fish's organs, especially the liver, spleen, and intestines, and the ultimate cause of death is usually kidney failure. Sick fish often appear listless, swim in circles, or hang just below the surface. Sick fish may have bulging eyes and a red, mottled appearance, and the internal organs will be blotchy red. Some fish may carry the disease without any outward signs of sickness. Scientists predict that VHSV will infect more fish host species in the Great Lakes area.

How do fish get VHS?

Fish are most likely to get VHSV by eating an infected fish. Fish may also pick up VHSV when they are in groups, especially when they are stressed and the water is cold. VHS can be in

VHS ALERT!

urine, feces, and sexual fluids and can be transmitted to other fish through wounds or the gills if the virus is quite concentrated in the water. In some fish species the virus also can be transmitted from an infected female to the surface of her eggs.

How does VHS spread from one lake to another?

There are a number of ways that VHSV can move from one body of water to another including: 1) moving infected fish, either game fish or bait fish, from one water to another (freezing does not kill VHSV); 2) moving infected water in ballast tank, in live wells of fishing boats, and in bilges of recreational and fishing boats; 3) planting or releasing infected fish and/or the water containing them from one water body to another; and 4) natural movement of infected fish from one water to another. Fish movement through the Soo Locks is limited.

Freezing live bait will not kill the virus. VHSV in dead bait fish can still infect another fish.

It is unlikely that VHSV will move from one lake to another on waterbirds and waterfowl, because a relatively high concentration of the virus in water is needed to affect its host. VHSV can not be transported through the feces or urine of fish-eating birds, because birds' body temperatures kill the virus.

What can I do to help stop the spread of VHSV?

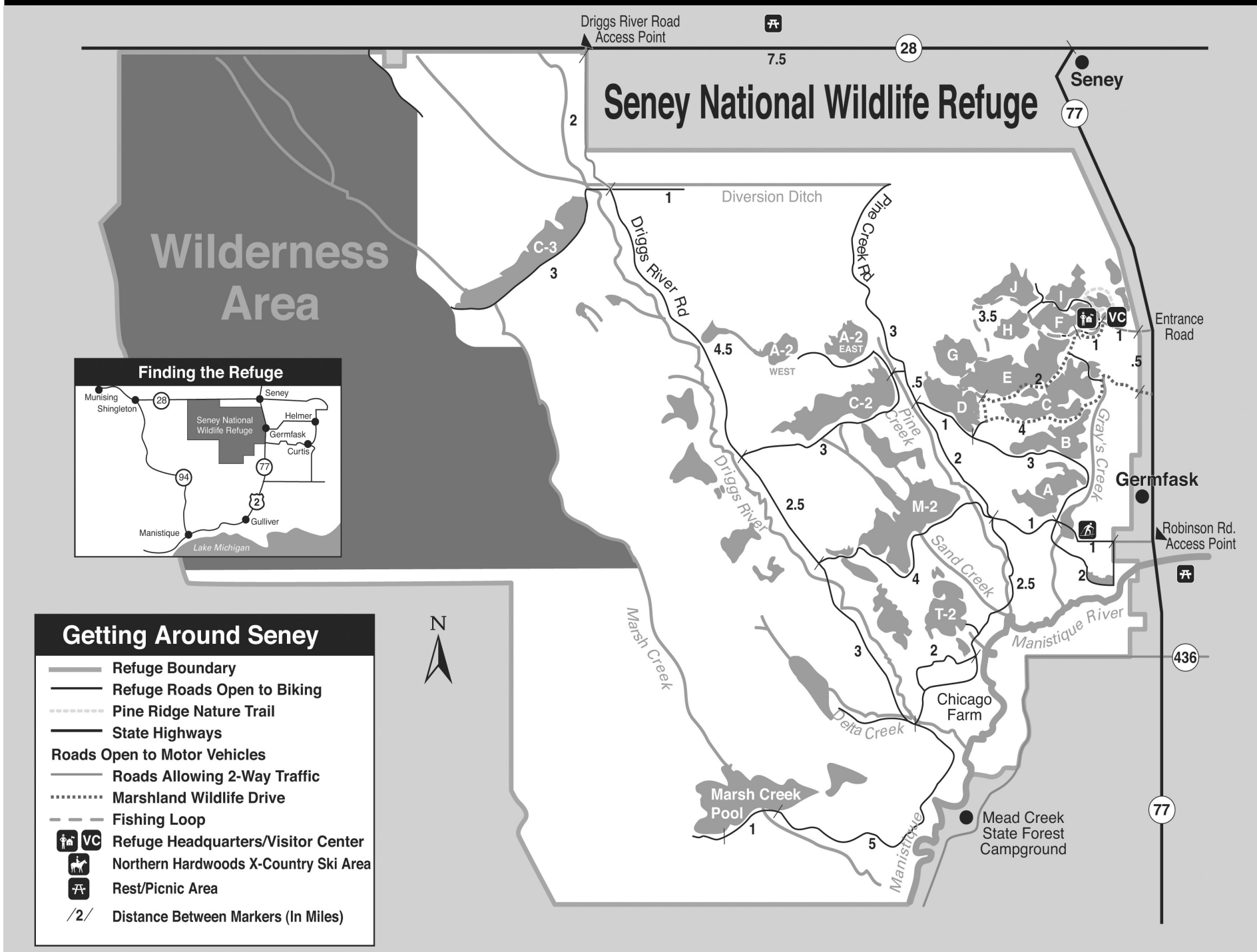
- By Superintendent's Order, Pictured Rocks **PROHIBITS** use as bait for fishing, any fish or fish part, including fish roe, amphibians, or crayfish, in NPS administered waters within the Lakeshore Zone of the National Lakeshore.
- Michigan State law prohibits the movement of any Prohibited Fish Species, or parts of fish, including roe, from an infected water body to a VHS-free management area.
- The launching of any watercraft, that has not been decontaminated prior to launch into NPS administered waters within the Lakeshore Zone of the National Lakeshore. Decontamination is defined as cleaning and drying the boat and all associated equipment so that they are dry and free of any vegetation, animals and mud and that the bilges, live wells and other compartments are also clean, dry and free of all organic material.
- Dry your waders, boat trailer, fishing gear, nets, etc., before fishing in another body of water.
- If you find dead fish, contact a park employee for a collection kit.
- Animal and Plant Health Inspection Service of the U.S. Department of Agriculture prohibits carrying live fish across state lines without a disease-free certification.
- This disease has the potential to significantly impact fishing resources important to us all.

Please remember - **You** have a responsibility to ensure that the bait and equipment you are using is VHS-free...



Stop Aquatic Hitchhikers

Seney National Wildlife Refuge



Discover Seney

SENEY NATIONAL WILDLIFE REFUGE is a great place for visitors of all ages and abilities to watch wildlife. Established in 1935 as a refuge and breeding ground for migratory birds and other wildlife, today the 95,238 acre Refuge supports a variety of wildlife including endangered and reintroduced species by providing a rich mosaic habitat. Nearly two-thirds of the Refuge are wetlands.

Visitor Center
Open May 15 - Oct. 15, 9 a.m. - 5 p.m., seven days a week, including holidays. Exhibits, a children's touch table, orientation slide show, and a bookstore. Binoculars and field guides can be checked out free of charge, courtesy of the Seney Natural History Association.

Marshland Wildlife Drive
This seven mile one-way auto tour route follows alongside wetlands and meadows and through forests. Three free wheelchair accessible observation decks with viewing scopes make this a great wildlife watching opportunity.

Pine Ridge Nature Trail
Starting from the Visitor Center, this 1.4 mile loop trail takes visitors through a variety of landscapes. Songbirds and beavers are common sightings along this trail.

Bicycling
Many miles of backcountry roads are available for biking through the Refuge. For those who seek wildlife and solitude, these are the trails for you. Trails are only open during daylight hours

so you need to plan your trip carefully. Refuge staff drive through the backcountry while conducting surveys, so please be aware of the possibility of vehicles on the roads. To help you plan your visit, mileage is marked on the Refuge map. Certain roads may be closed to all entry during peak migration periods. The Pine Ridge Nature Trail and the cross-country ski trails are closed to bicycles.

Canoeing
Enjoy a day of paddling along the Manistique River, which flows through the southern part of the Refuge. Outfitters are located in Germfask. Use is limited to daylight hours with no overnight camping allowed. No boats or other flotation devices are allowed on Refuge pools. Due to numerous snags, shallow water, limited access by road, and no camping allowed, the Driggs River is not recommended for canoeing.

Fishing
Anglers can fish along the 3.5 mile Fishing Loop or at the accessible fishing pier. Species found on the Refuge include northern pike, yellow perch, brown bullhead, brook trout, and sunfish. To protect the Trumpeter Swan and Common Loon, lead sinkers cannot be used on the Refuge. Check the fishing brochure for current rules.

Hunting
Ruffed grouse, woodcock, snowshoe hare, deer, and bear may be hunted during some state seasons, in designated areas. Check the hunting leaflet for current rules.

Winter Activities
The Northern Hardwoods Cross-Country Ski Area offers over nine miles of groomed diagonal-tracked trails. Turn west off M-77 onto Robinson Road 1/3 mile south of the blinking light in Germfask. The trailhead is at the end of the road. Snowshoeing is allowed anywhere except on the ski trails. Snowmobiles are not permitted on the Refuge.



Seney's Strangmoor Bog

In the southwest corner of the Seney National Wildlife Refuge is a special place that few people have ever seen. Getting to and from this place is only by foot, unless transportation by a specialized tractor or helicopter is arranged. If you plan on going, be sure to bring a bug net, waders, a map and compass, and the skills to use them.

Here carnivorous plants such as the tiny Bladderwort compete for food with dragonflies. Beaver, the occasional moose, or a coyote may follow the same path along narrow sedge-filled corridors. From a Northern Harrier's birds-eye view, it would be easy to see vast miles of earth-colored Sphagnum mosses, and plant communities that form a mosaic as elaborate as an oriental rug.

This special place is known as the Strangmoor Bog, and it is one of the southern-most, sub-arctic patterned bogs that exist in North America today. Because of its rarity, the Strangmoor Bog was registered as a National Natural Landmark in 1973, and is currently protected within the 9,700-acre Seney Wilderness Area.

Although called a bog, patterned peatland is probably a more accurate name for this wetland habitat. A peatland is a waterlogged terrestrial ecosystem in which a layer of peat (organic matter made up of partially decomposed remains of dead plants) accumulates for a thickness of at least 12 inches. A patterned peatland is a peatland marked by distinct patterns of vegetation. These plant communities have developed orderly patterns in response to subtle gradients in the water chemistry and water movements.

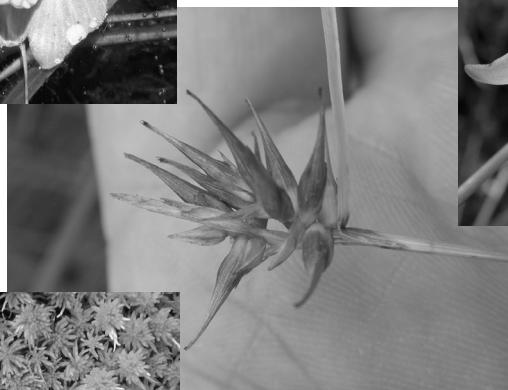
Although Seney's Strangmoor Bog is a relatively flat landform, runoff and groundwater move from the northwest to the southeast and are channeled across the peat surface. The patterns in this landform are a distinctive network of low peat ridges (strings) and wet sedgy hollows (flarks) arranged perpendicular to the slope. This series of strings and flarks can be nearly imperceptible from the ground unless you know what you are looking for, but from above the pattern is quite obvious and remarkable. Tree islands are scattered throughout the network of strings and flarks and are oriented parallel to the prevailing slope with rounded ends pointed upstream and tapering tails that stream downslope.

One scientific author gives this poetic description of a patterned peatland from a birds' eye view. "In places the patterns may also conjure the image of a fleet of ships steaming at sea. The ships have rounded bows and trailing wakes that interrupt the wavelike pattern of the ridges and troughs in the surrounding ocean. The patterns seem to be in motion, with the ships gliding effortlessly over the waves."

Whether looked at scientifically or poetically, from the ground or from above, Seney's Strangmoor Bog is a unique and fascinating environment, wet and difficult to access and therefore virtually untouched. A great place for researchers to study and for all of us to be intrigued by.

A National Natural Landmark

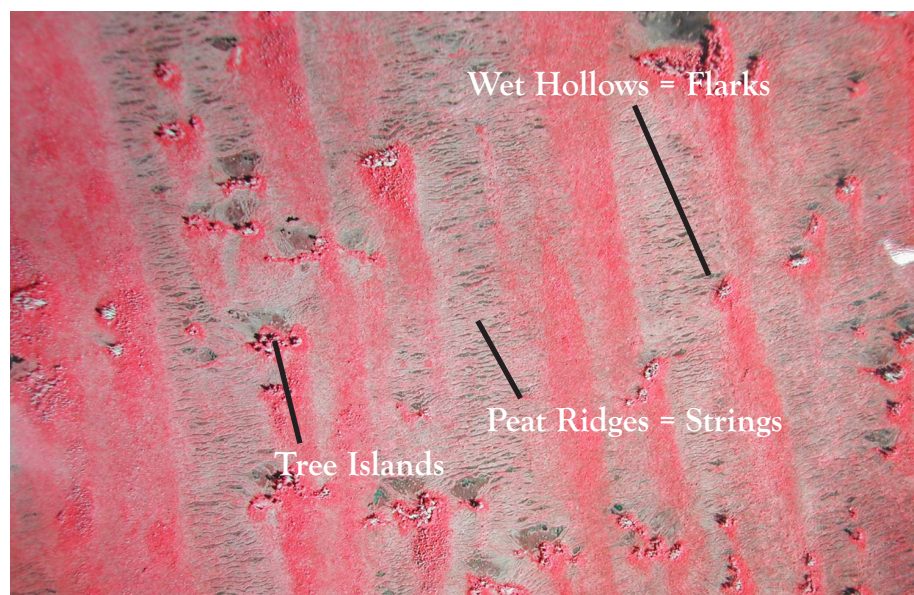
The National Natural Landmarks (NNL) Program encourages the conservation of outstanding examples of natural history in the United States. According to the National Park system, NNL's are designated by the Secretary of the Interior and recognize the best examples of biological and geological features in both private and public ownership. Currently there are fewer than 500 sites designated as an NNL. The Strangmoor Bog was designated a National Natural Landmark in 1973 because it was one of the most southern, undisturbed, patterned or stringed bogs in the country.



Clockwise from top left: bladderwort, pagonia, sedge species, sphagnum



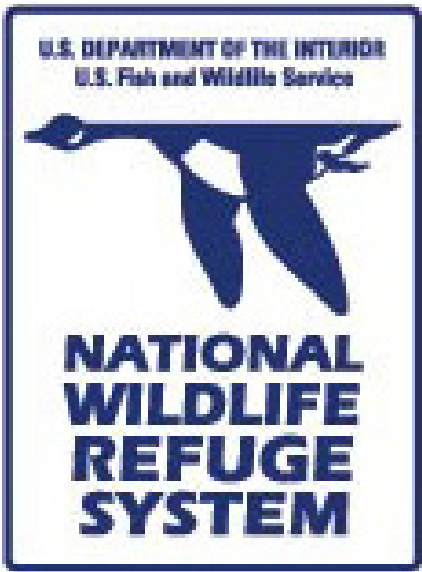
Aerial view of patterned peatland



Infra-red arial view of Stangmoor Bog. Long oval shapes, oriented vertically are tree islands. Ribbon-like lines running horizontally between the islands are strings and flarks.



View of "strings" and "flarks" from ground. Tree line in background is a "tree island".



America’s National Wildlife Refuges
.....where wildlife comes naturally!

If you travel much in wilder sections of our country, sooner or later you are likely to meet the sign of the flying goose - the emblem of the National Wildlife Refuges.

You may meet it by the side of the road crossing miles of flat prairie in the Midwest, or in the hot deserts of the Southwest. You may meet it by some mountain lake, or as you push your boat through the winding salty creeks of a coastal marsh.

Wherever you meet this sign, respect it. It means the land behind the sign has been dedicated by the American people to preserving for themselves and their children, as much of our native wildlife as can be retained along with our modern civilization.

Wild creatures, like men, must have a place to live. As civilization creates cities, builds highways, and drains marshes, it takes away, little by little, the land that is suitable for wildlife. And as their space for living dwindles, the wildlife populations themselves decline. Refuges resist this trend by saving some areas from encroachment, and by preserving in them, or restoring where necessary, the conditions that wild things need in order to live.” From Rachel Carson’s essay introducing the series “Conservation in Action,” a collection of narratives about Refuges and the Refuge System

Wildlife First

- The National Wildlife Refuge System contains 540 refuges and 3,000 waterfowl production areas located throughout all 50 states and several U.S. territories. At 95 million acres, it is the world’s largest system of lands and waters whose primary purpose is the conservation of wildlife and habitat
- Our national wildlife refuges provide homes for over 700 bird species, 220 mammal species, 250 reptile and amphibian species, and more than 200 kinds of fish.
- Refuges are home to 25 percent of all federal threatened and endangered species.
- Each year, millions of migrating birds use refuges as stepping stones to rest as they fly thousands of miles south for the winter and return north for the summer.

Welcoming People

- Hunting and Fishing: Hunters are welcome on more than 300 national wildlife refuges and on 3,000 waterfowl production areas, which are small wetlands located mainly in the upper Midwest. Anglers also enjoy the outdoors at more than 260 wildlife refuges where they catch a variety of fish. Hunting and fishing are both allowed at Seney National Wildlife Refuge. See brochures for regulations.
- Wildlife observation and photography: Bird watchers, photographers and other nature lovers visit refuges for great opportunities to see local wildlife species in their natural habitats and great congregations of birds during peak migrations. Seney has observation decks, nature trails, an auto tour, and miles of backcountry roads for observing wildlife and their habitats.
- Interpretation and environmental education: Wildlife refuges are great places for children and adults to learn about the natural world. Programs are offered at over 230 wildlife refuges around the country. Seney offers tours, programs and special events, check at the visitor center for a calendar of activities.



Managing for Wildlife

WATER LEVELS ON over 7,000 acres of Refuge habitat are managed using a system of water control structures and dikes. High water levels protect fish populations during the winter, protect nesting birds from predation, and regulate vegetation growth. Low water levels create mudflats for cranes and other birds, enhance feeding opportunities for migratory waterfowl and shorebirds, and make fish more accessible to osprey and bald eagles. Prescribed burns, river and wetland restoration, mowing, and forest management are used by the Refuge to maintain healthy and diverse wildlife habitats.

A Seney Year

Spring

About the time the ice melts off the pools, the Refuge’s summer residents begin returning to their nesting grounds. Canada geese are usually the first to arrive in late March to early April. Their familiar honking is a welcome sign that spring is near. Following shortly behind are sandhill cranes and red-winged blackbirds. Common loons arrive after most of the ice has melted.

Late Spring - Early Summer

Spring and fall are the best viewing times for most wildlife species. Biting insects (black flies, deer flies, and mosquitoes) can be a problem during warmer months. Wood ticks may also be found. Refuge habitat supports a variety of wildlife including black bear, white-tailed deer, coyote, river otter, beaver, ruffed, spruce, and sharp-tailed grouse, yellow rails, woodcock, bald eagles, fox, muskrat, mink, turtles, frogs and insects. The Refuge’s many species of songbirds are some of the last to arrive. By the end of May, birdwatchers will be delighted with the variety of birds. The best time to listen for birds is late May to early June.

Autumn

Peak waterfowl migration occurs from the end of September to mid-October. Loons are some of the earliest to leave in September. By the end of October most migratory birds have left the Refuge for their wintering grounds. Common species include canada geese, hooded mergansers, mallards, black ducks, ring-necked ducks, wood ducks, and sandhill cranes.

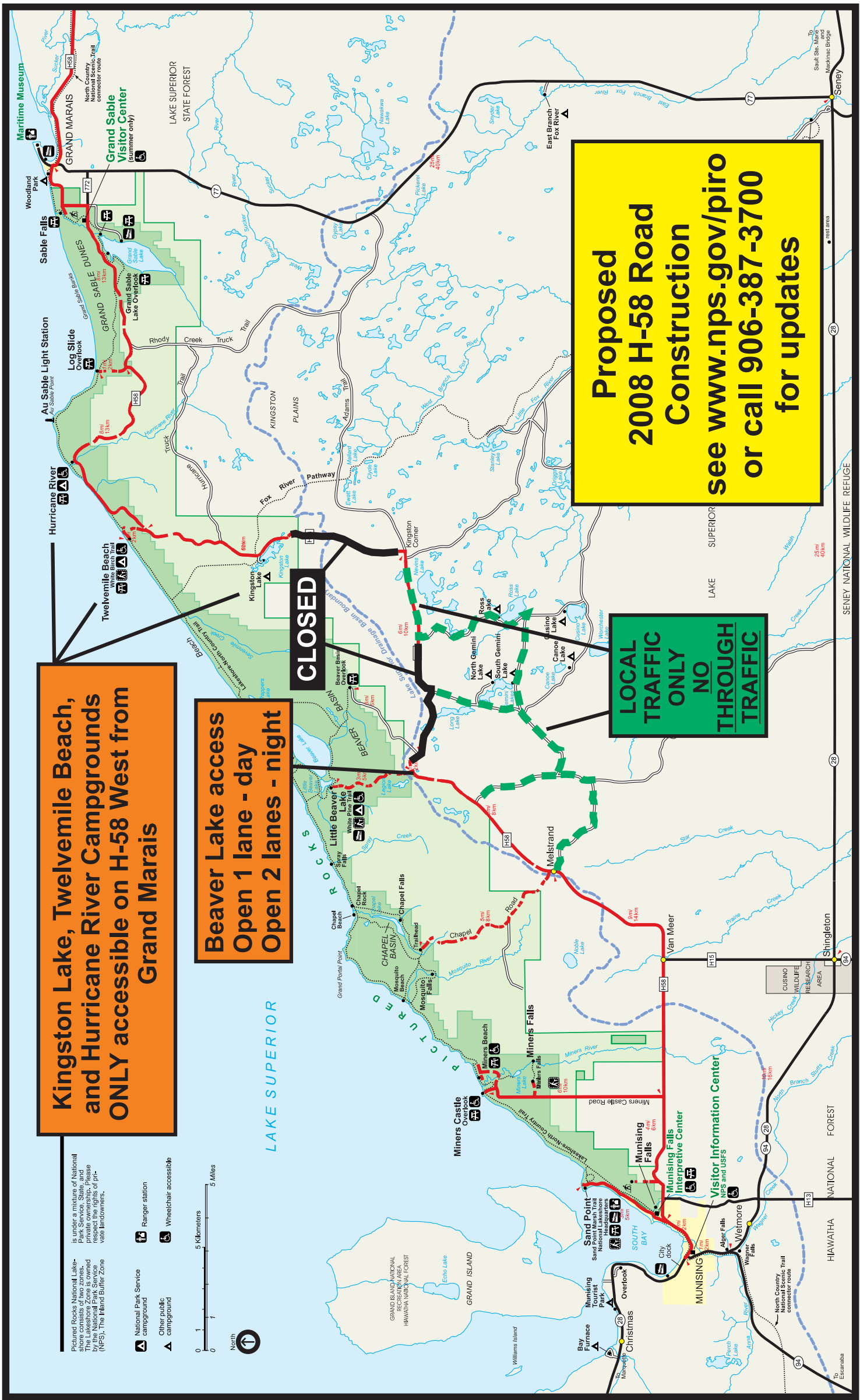


Special Rules

- Please do not feed wildlife.
- Daylight use only.
- Dogs are allowed on a leash.
- No camping or overnight parking is allowed.
- Off-road vehicles are prohibited.
- Open fires are not allowed.
- No boats or flotation on Refuge pools

Seney National Wildlife Refuge
1674 Refuge Entrance Road
Seney, MI 49883
(906) 586-9851 ext.15
<http://midwest.fws.gov/seney>

Pictured Rocks National Lakeshore



Lakeshore Raises Visitor Use Fees

Pictured Rocks National Lakeshore has been approved for an increase in fees charged for frontcountry and backcountry camping and for guided tours of the interior of the Au Sable Light Station.

Fees for camping at the Lakeshore’s three drive-in campgrounds (Little Beaver Lake, Hurricane River, and Twelvemile Beach) will increase from \$12 per night to \$14 a night. A fee of \$16 per night is now charged for the waterfront campsites within the Twelvemile Beach Campground.

The fees were determined using a comparability study of other similar campgrounds in the region at Porcupine Mountains and Tahquamenon Falls State Parks, at Lake Superior Provincial Park in Canada, and at the nearby Bay Furnace and Pete’s Lake Campgrounds operated by the Hiawatha National Forest.

“We are required by National Park Service policy to ensure that our fees are not excessive when compared to other nearby facilities” Superintendent Jim Northup said. “Our analysis indicated that we were actually below those regional averages and this increase would bring our fees in line with other similar facilities.”

“These funds are used to support the summer seasonal staff that take care of the frontcountry camping facilities, empty the trash and clean the bathrooms,” Northup said, “and to fund our summer fee collection operation.”

The per person per night fee for camping overnight at one of the park’s 13 designated backcountry campsites has increased by \$1 from \$4 per night to \$5.

The fee for the guided tours of the interior of the Au Sable Light Station offered in the summer months increase from \$2 per person to \$3.

“It is very important for visitors to understand that we are able to keep 100% of the fees that are collected in the park, and we put that money right back in to resource protection and maintaining safe and high quality trails and facilities.”

Download Park Information

In an effort to make Lakeshore information more accessible to visitors with portable electronic devices, park staff have developed two “Information Download” locations at the Interagency Visitor Center in Munising, and Grand Sable Visitor Center near Grand Marais. At these locations, visitors may access two laptop computers that hold a variety of park publications, maps, and podcasts. The information resides on the hard drive which is periodically scanned for viruses. Downloading is easy – just plug in your mp3, iPod, Zune, Rio, Sandisk, or other player, then drag and drop the files you are interested in. Examples include site bulletins on Lakeshore logging and blast furnace history, backcountry maps, Leave No Trace and Miners Castle podcasts, and a host of other information. We hope you use and enjoy this trial effort at providing digital media for your information. Please let us know how it works for you!

